Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1-62. (Canceled)

63. (Currently amended) ~~The apparatus of Claim 60 in which~~ A lighted handle, comprising:

an elongate light transmitting bar having first and second end portions;

spaced, first and second mounting brackets which are engagable with a support surface and carry said first and second end portions of said light transmitting bar, said first bracket having a recess in which said first end portion of said bar is fixedly recessed;

a narrow beam light emitting diode located in said first mounting bracket and aimed longitudinally of said light transmitting member to make said light transmitting member more visible; and

said recess and bar first end portion have engageable peripheral walls, at least one of which tapers, the central axes of said recess and bar end portion being in one of a range of relative angular positions.

64. (Withdrawn – currently amended) The apparatus of Claim 63 [[60]] in which said bar comprises a plastic extrusion, said bar having an intermediate portion of substantially constant cross section between said first and second end portions, at least one said end portion having a machined outer periphery and said bar intermediate portion has an outer peripheral surface with a user grip enhancing contour.

65. (Withdrawn) The apparatus of Claim 64 in which said contour has axially parallel, circumferentially spaced contour elements selected from the group consisting of grooves and ribs.

66. (Previously presented) A lighted handle, comprising:

an elongate light transmitting bar having first and second end portions;

spaced, first and second mounting brackets which are engagable with a support surface and carry said first and second end portions of said light transmitting bar, said first bracket having a recess in which said first end portion of said bar is fixedly recessed;

a narrow beam light emitting diode located in said first mounting bracket and aimed longitudinally of said light transmitting member to make said light transmitting member more visible; and

said bar first end portion further having an annular groove, and an annular seal ring bearing on an interior peripheral surface of said recess, said bar first end portion being frictionally, removably, fixed in said recess.

67. (Canceled)

68. (Withdrawn – currently amended) The apparatus of Claim 63 [[60]] wherein said first mounting bracket is hollow, said light transmitting bar having its said first end portion telescoped in said recess in said first mounting bracket, said light emitting diode being fixed in said hollow bracket and aimed at the adjacent end of said light transmitting bar, an electric storage cell replaceably located in said hollow first bracket and connected in circuit with said light emitting diode.

69. (Withdrawn) The apparatus of Claim 68 in which said first bracket has a cell entry/exit portal to facilitate cell replacement.

70. (Withdrawn) The apparatus of Claim 68 in which an ambient light responsive, cell conserving switch is carried by said first bracket and connected in circuit with said light emitting diode and cell.

71. (Withdrawn) The apparatus of Claim 68 in which said hollow first bracket is sized to carry a battery pack at least as large as two commercially available AAA cells.

72-73. (Canceled)

74. (Withdrawn – currently amended) The apparatus of Claim 63 [[60]] including a low voltage electric current supply unit, of voltage lower than conventional AC household electric current and connected in circuit with said light emitting diode,

said first mounting bracket compactly pocketing said first end portion of said light transmitting bar, said light emitting diode, and said low voltage current supply unit.

75. (Withdrawn) The apparatus of Claim 74 in which said low voltage electric current supply unit comprises an electric storage cell connected in circuit with said light emitting diode, said mounting bracket including a releasable cell holding member replaceably locating said cell.

76. (Withdrawn) The apparatus of Claim 74 in which said low voltage electric current supply unit comprises (1) a 110 volt AC converter circuit having a direct current output path through said light emitting diode, and (2) insulated conductors extending from said handle to a remote 110 volt AC connector device.

77. (Withdrawn) The apparatus of Claim 74 in which said first mounting bracket has an interior through passage, one end of said passage being fixed with respect to said first end portion of said bar, said light emitting diode and at least a portion of said electric current supply unit being disposed in said passage.

78. (Withdrawn) The apparatus of Claim 77 in which said electric current supply unit comprises an electric storage cell replaceably housed in said passage.

79. (Withdrawn) The apparatus of Claim 77 in which said current supply unit comprises an AC-to-DC converter in said passage and insulated AC conductors running from said passage and out of the other end of said through passage.

80. (Withdrawn – currently amended) The apparatus of Claim 63 [[44]] in which said elongate light transmitting bar~~member~~'s first end portion has a free end face which is

diametrically planar, said light emitting diode having a light emitting end fixed immediately adjacent said diametrically planar bar free end face such that any clearance there between is a minor fraction of the diameter of said light emitting diode.

81. (Withdrawn – currently amended) The apparatus of Claim 63 [[44]] in which said elongate light transmitting bar~~member~~ first end portion having a free end which has an axially opening blind-ended hole substantially of the diameter and length of said light emitting diode and snugly housing therein said light emitting diode, said light emitting diode being aimed substantially toward the blind end of said hole.

82. (Withdrawn –currently amended) The apparatus of Claim 63 [[60]] in which said recess comprises (1) a relatively larger diameter outboard portion receiving said bar first end portion and (2) a relatively smaller diameter inboard portion receiving said light emitting diode, said recess outboard and inboard portions having longitudinal axes which are parallel but radially spaced.

83. (Previously presented) A lighted handle, comprising:

an elongate light transmitting bar having first and second end portions flanking a hand graspable intermediate portion;

spaced, first and second, mounting brackets which are engagable with a support surface to which said lighted handle is to be mounted, and which carry said first and second end portions of said light transmitting bar, said first bracket having:

(1) a surface mountable foot,

(2) a hollow leg extending from said foot toward said bar so as to define a free end,

(3) a recess having an axially inner end and opening axially from the free end of said leg and snugly receiving said bar first end portion,

(4) an outward facing coaxial annular step extending radially in from the axially inner end of said recess to define a radially inner edge,

(5) an elongate passage extending at reduced diameter from the radially inner edge of said annular step axially inward further into said leg of said mounting bracket, said passage

having an intermediate bend and a remote end opening through said surface mountable foot of said mounting bracket,

said bar first end portion having:

(1) an annular, radially inward extending step abutting the free end of said leg,

(2) a reduced diameter neck extending from said annular step snugly into said recess in said mounting bracket leg

(3) a diametrically extending flat end on said neck axially opposing said outward facing annular step and passage in said leg;

an illumination unit having an inboard portion snugly seated in said passage substantially coaxially with an adjacent said outward facing annular step and having an outboard portion facing substantially coaxially into said recess, said illumination unit including a narrow beam light emitting diode having:

(1) a terminal end substantially coaxially fixed on said illumination unit inboard portion,

(2) a light beam emitting end opposing said flat end of said reduced diameter neck of said light transmitting bar wherein said light beam emitting end emits a narrow light beam, and

(3) and intermediate portion extending lengthwise substantially coaxially with said leg recess and said light transmitting bar reduced diameter neck.

84. (Previously presented) The apparatus of Claim 83 in which said recess is tapered at not greater than about 4 degrees to accommodate manufacturing variations in angle between the end and intermediate portions of said light transmitting bar.

85. (Previously presented) The apparatus of Claim 83 in which said illumination unit inboard portion bottoms against said bend.

86. (Previously presented) The apparatus of Claim 83 in which said light emitting diode is spaced from said bar across a length portion of said recess and has a beam half angle in the range of about 15 to 45 degrees.

87. (Previously presented) The apparatus of Claim 83 in which said annular steps are substantially coaxially spaced and said light beam emitting end of said light emitting diode is located axially between said annular steps.

88. (Previously presented) The apparatus of Claim 83 in which said annular step of said light transmitting bar transitions through a rounded annular fillet into the peripheral surface of said reduced diameter neck, the free end of said leg transitioning with an annular round into the inner peripheral surface of said recess of said mounting bracket leg.

89. (Previously presented) The apparatus of Claim 83 in which said second mounting bracket is similar to said first mounting bracket and said bar second end portion is similar to said bar first end portion but wherein said illumination unit is replaced by a light deflecting unit having a concave reflector opposing the free end of said bar second end portion, said light deflecting unit further including a spacer portion snugly received in the passage of said second bracket and having a free annular edge bottomed against a bend in the inner periphery of the mid-portion of the passage of said second bracket, such that said reflector receives light from said light emitting diode in said first bracket member and transmitted axially through said light transmitting bar and reflects same back through said light transmitting bar toward said light emitting diode.

90. (Currently amended) The apparatus of Claim 63 [[44]] in which said light emitting diode is of a type which is structured so as to be self focused in a relatively narrow light beam aimed along a central diode axis wherein the light output of said light emitting diode on said central diode axis is reduced to half at an angle in the range of 15 to 45 degrees off that axis, said light emitting diode being oriented in said first mounting member such that substantially all of the light output of said light emitting diode is applied directly to the opposed end of said light transmitting barmember.

91. (Currently amended) The apparatus of Claim 63 [[60]] in which said bar comprises a plastic extrusion, said bar having an intermediate portion of substantially constant cross section

between said first and second end portions, at least one said end portion having a machined outer periphery.

92-93. (Canceled)

94. (Currently amended) The apparatus of Claim 63 [[60]], wherein said light emitting diode emits a narrow light beam aimed directly from said light emitting diode to an opposing surface of said first end portion of said light transmitting member.

95. (Currently amended) The apparatus of Claim 63 [[60]], wherein said light emitting diode emits a narrow light beam having a central light beam axis extending from said light emitting diode directly to an opposing surface of said first end portion, which said opposing surface faces longitudinally from said light transmitting member toward said light emitting diode in opposing relation therewith.